

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method for updating communication equipment in a communication system ~~through a server, which~~ wherein a server stores updated files ~~used for updating the~~ communication equipment, comprising:

backing up configuration data [[in]]of the communication equipment to the server;
downloading the updated files to the communication equipment from the server~~[[,]]~~ and loading the updated files [[to]]in the communication equipment ~~to implement the communication equipment update;~~
recovering the configuration data backed up in the server to the communication equipment;
determining whether the configuration data need to be modified with respect to the updated files; and
if the configuration data need to be modified, modifying the configuration data so as to complete the updating of the communication equipment.

2. (Currently amended) The method according to Claim 1, wherein, ~~the step of~~ backing up the configuration data [[in]]of the communication equipment to the server ~~further~~ comprises:

transmitting the configuration data of the communication equipment to the server; and
determining whether the server monitoring the backup procedure of the configuration data are successfully backed up to the server judging whether;
wherein if the configuration data are not successfully backed up to the server, the method further comprises; if yes, executing the step of downloading the updated files to the communication equipment from the server and loading the updated files to the communication equipment to implement the communication update; otherwise, instructing the communication equipment to execute the backup operation for
repeating the transmission of the configuration data to the server again.

3. (Currently amended) The method according to Claim 2, wherein determining whether the configuration data are successfully backed up to the server comprises; ~~the step of the server judging whether the configuration data are successfully backed up comprises one of the two following procedures:~~

judging whether a backup failure message is received from the communication equipment; ~~and or~~

~~judging whether the~~ transmission of the configuration data backup operation exceeds a ~~scheduled~~ predetermined time;

wherein if a backup failure message is received from the communication equipment or the transmission of the configuration data exceeds the predetermined time, the configuration data are not successfully backed up to the server.

4. (Currently amended) The method according to Claim 2, ~~wherein before instructing the communication equipment to execute the backup operation for the configuration data again further comprising:~~

repeating the transmission of the configuration data to the server comprises:

notifying a user of the communication equipment that backing up of the current configuration data backup has failed is not successful and asking the user whether to repeat the backing up of the configuration data over again; and

repeating the transmission of the configuration data to the server if after receiving the user's an instruction from the user to repeat the backing up of the configuration data up the data over again is received;[[,]]

wherein if the instruction from the user to repeat the backing up is not received, the transmission of the configuration data to the server is not repeated. executing the step of instructing the communication equipment to execute the backup operation again; otherwise, ending the current process.

5. (Currently amended) The method according to Claim 1, wherein; the communication equipment is an Integrated Access Device (IAD) and the server is a File Transfer Protocol/Trivial File Transfer Protocol (FTP/TFTP) server, and ~~the step of wherein~~ backing up the configuration data [[in]]of the communication equipment to the server further comprises:

sending, by an IAD Management System (IADMS), sending a Simple Network Management Protocol (SNMP) backup configuration data command to the IAD; wherein the commend specifies an address of the FTP/TFTP server for backing up the configuration data; and

~~and the step of backing up the configuration data in the communication equipment to the server comprises: after receiving the SNMP backup configuration data command, the IAD transmitting, by the IAD, the configuration data files to the specified FTP/TFTP server via the FTP/TFTP protocol after receiving the SNMP backup configuration data command.~~

6. (Currently amended) The method according to Claim 1, wherein[[,]] the configuration data comprise one or more ~~than one type among of:~~

user data,

port data,

protocol parameter data, and

default parameter data ~~for guaranteeing the normal operation of the equipment.~~

7. (Currently amended) The method according to Claim 1, wherein~~, the step of downloading the updated files to the communication equipment from the server and loading the updated files~~ [[to]]in the communication equipment to implement the communication update further comprises:

receiving the updated files from the server and loading the updated files in the communication equipment; and

determining whether the updated files are successfully loaded in the communication equipment; the server monitoring the update procedure of the communication equipment and judging whether

wherein if the updated files are not [[is]]successfully loaded in the communication equipment, the method further comprises: if yes, executing the step of

recovering the configuration data backed up in the server to the communication equipment; otherwise, instructing the communication equipment to execute the update operation over again repeating the operation of receiving the updated files from the server and loading the updated files in the communication equipment.

8. (Currently amended) The method according to Claim 7, wherein determining whether the updated files are successfully loaded in the communication equipment comprises; ~~the step of the server judging whether the update is successful comprises one of the two following procedures:~~

judging whether an update failure message is received from the communication equipment; ~~and or the operation of~~

~~judging whether the~~ receiving the updated files from the server and loading the updated files in the communication equipment operation ~~exceeds the a scheduled predetermined time;~~

wherein if an update failure message is received from the communication equipment or the operation of receiving the updated files from the server and loading the updated files in the communication equipment exceeds the predetermined time, the updated files are not successfully loaded in the communication equipment.

9. (Currently amended) The method according to Claim 7, wherein repeating the operation of receiving the updated files from the server and loading the updated files in the communication equipment comprises: ~~before instructing the communication equipment to execute the update operation again further comprising:~~

notifying [[the]]a user of the communication equipment that the updated files are not successfully loaded in the communication equipment ~~the current update has failed and asking the user whether to repeat downloading the updated files from the server and loading the updated files to the communication equipment over again; and~~

repeating the operation of receiving the updated files from the server and loading the updated files in the communication equipment if after receiving the user's an instruction from the user to update the equipment over again repeat the downloading and loading the updated files is received, ~~executing the step of instructing the communication equipment to execute the update operation over again~~

wherein if the instruction from the user to repeat the downloading and loading the updated files is not received, the operation of receiving the updated files from the server and loading the updated files in the communication equipment is not repeated, otherwise, ending the current process.

10. (Currently amended) The method according to Claim 7, ~~further comprising:~~ wherein before downloading the updated files to the communication equipment from the server and loading the updated files in the communication equipment, the method further comprises:

~~a step of storing, in the communication equipment, current files which will be changed by loading the updated files an old software version in the communication equipment before executing the update operation, and~~

~~wherein a step of if the updated files are not successfully downloaded and loaded in the communication equipment, instructing the communication equipment to recover the current software to the old version files in the communication equipment are recovered before instructing the communication equipment to execute the update operation over again the operation of downloading the updated files to the communication equipment from the server and loading the updated files in the communication equipment is repeated.~~

11. (Currently amended) The method according to Claim 1, wherein[,] the communication equipment is an Integrated Access Device [[the]](IAD), and the server is a File Transfer Protocol/Trivial File Transfer Protocol [[the]](FTP/TFTP) server,

and ~~where the step of downloading the updated files to the communication equipment from the server and loading the updated files [[to]]in the communication equipment to implement the communication update further comprises:~~

~~sending, by an IAD Management System~~ [[the]](IADMS), ~~sending an a Simple Network Management Protocol (SNMP) update command to the IAD, wherein which the update command comprises the specifies an address information of the FTP/TFTP server and the names information of the updated files;~~

~~and the step of downloading the updated files corresponding to the specified file names to the communication equipment-IAD from the specified FTP/TFTP server via the FTP/TFTP protocol and loading the updated files [[to]]in the communication equipment-IAD comprises:~~

~~after receiving the SNMP update command, the IAD downloading the updated files corresponding to the updated files name from the specified FTP/TFTP server via the FTP/TFTP protocol, and then loading the updated files.~~

12. (Currently amended) The method according to Claim 1, wherein, ~~the step of recovering the configuration data backed up in the server to the communication equipment further comprises:~~

~~downloading the configuration data backed up in the server to the communication equipment the server monitoring the recovery procedure of the configuration data, and~~

~~determining~~ ~~judging~~ whether the configuration data are successfully recovered[[,]];
 ~~wherein if the configuration data are not successfully recovered~~ yes, the method further comprises:

~~ending the current process; otherwise, instructing the communication equipment to execute the recovery operation for the configuration data over again~~ repeating the operation of downloading the configuration data backed up in the server to the communication equipment.

13. (Currently amended) The method according to Claim 12, wherein ~~determining~~, ~~the step of the server judging~~ whether the configuration data are successful recovered comprises ~~one of the two following procedures:~~

~~judging whether a recovery failure message is received from the communication equipment; and or~~

~~judging whether the recovery operation of downloading the configuration data backed up in the server to the communication equipment~~ exceeds the scheduled a predetermined time,

wherein if a recovery failure message is received from the communication equipment or the recovery operation of downloading the configuration data backed up in the server to the communication equipment exceeds the predetermined time, the configuration data are not successful recovered.

14. (Currently amended) The method according to Claim 12, wherein repeating the operation of downloading the configuration data backed up in the server to the communication equipment comprises:

~~before instructing the communication equipment to execute the recovery operation for the configuration data over again, further comprising:~~

~~notifying the user~~ a user of the communication equipment that that the recovering the current configuration data backed up in the server to the communication equipment recovery has failed and asking the user whether to repeat recovering the configuration data over again; and

after receiving the user's instruction to recover the configuration data over again, executing the step of instructing the communication equipment to execute repeating the operation of downloading the configuration data backed up in the server to the communication

equipment recovery operation over again; otherwise, ending the current process if an instruction from the user to repeat the recovering of the configuration data is received.

15. (Currently amended) The method according to Claim 1, wherein; the communication equipment is an Integrated Access Device ~~[[the]]~~(IAD), and the server is a File Transfer Protocol/Trivial File Transfer Protocol ~~[[the]]~~(FTP/TFTP) server, and wherein the step of recovering the configuration data backed up in the server to the communication equipment further comprises:

~~the IADMS-sending, by an IAD Management System (IADMS),~~ ~~[[an]]~~a Simple Network Management Protocol (SNMP) ~~recovery-configuration data recovery command to the IAD, which wherein the configuration data recovery command comprises the specifies an address information of the FTP/TFTP server and the names information of the configuration data files;~~

~~and the step of recovering the configuration data backed up in the server to the communication equipment comprises:~~

~~after receiving the SNMP recovery configuration data command, the IAD-downloading, by the IAD, the configuration data files corresponding to the specified configuration data files name from the specified FTP/TFTP server via the FTP/TFTP protocol after receiving the configuration data recovery command, and then-loading the configuration data files in the IAD.~~

16. (Currently amended) The method according to Claim 1, wherein,~~the step of recovering~~ modifying the configuration data ~~backed up in the server to the communication equipment further comprises a step of modifying the format of the configuration data.~~

17. (New) Communication equipment, comprising:

an interface unit, configured to establish a communication connection with a sever, wherein the server is configured to store updated files for updating the communication equipment; and

an update control unit, configured to:

transmit configuration data of the communication equipment to the server so as to back up the configuration data,

download updated files from the server and load the updated files in the communication equipment ;

recover the configuration data backed up in the server to the communication equipment,

determine whether the configuration data need to be modified with respect to the updated files; and

if the configuration data need to be modified, modify the configuration data so as to complete the updating of the communication equipment.

18. (New) The communication equipment according to claim 17, wherein the communication equipment is an Integrated Access Device (IAD) and the server is a File Transfer Protocol/Trivial File Transfer Protocol (FTP/TFTP) server, and wherein the updating of the IAD is controlled by an IAD Management System (IADMS).